

REMARKS

Claims 1-5, 13-18, 20, 21 and 26-56 were pending in this application. The Examiner rejected claims 1-4, 13-15, 26-31, 38, and 45-52 under 35 U.S.C. § 102(e) over U.S. Patent No. 6,858,024 to Berg *et al.*; and claims 1-5, 16-18, 20, 21, 32-44, and 50-56 under 35 U.S.C. § 103(a) over U.S. Patent No. 5,318,588 to Horzewski in view of Berg *et al.* After entry of this paper, claims 1-5, 13-18, 20, 21 and 26-56 will be pending in this application.

Claim Rejections – 35 U.S.C. § 102(e)

The Examiner rejected claims 1-4, 13-15, 26-31, 38, and 45-52 under 35 U.S.C. § 102(e) over U.S. Patent No. 6,858,024 to Berg *et al.* The detailed rejections are set forth in paragraph 2 of the Office action. Applicant respectfully traverses and submits that the above claims were not anticipated by Berg. Without disclaiming any other inventive aspects of the claimed invention, Applicant submits that, first, Berg does not teach a device with an inner and an outer coaxial layer, wherein the circumference of the inner layer is discontinuous, and the circumference of the outer layer of the Berg device is continuous; and, second, Berg does not teach that a device with at least one layer having first and second types of sections varying in a circumferential direction.

Among the rejected claims, claims 1 and 26 of Applicant's invention are independent claims and each recites, *inter alia*, that a conduit of a device having inner and outer coaxial layer bonded together such that the outer layer surrounds the inner layer, wherein the circumference of the inner layer is discontinuous so as to form a discontinuity and is non-overlapping, and the circumference of the outer layer is continuous.

Applicant submits that Berg does not teach a device with an inner and an outer coaxial layer, wherein the circumference of the inner layer is discontinuous, and the circumference of the outer layer of the Berg device is continuous. Berg teaches a guiding catheter with increased flexibility. Berg guide catheter incorporates an inner tubular member, a wire braid disposed over at least a portion of the inner tubular member and a plurality of discrete segments of outer tubular member overlying the braid and inner tubular member (Berg, Column 2, Lines 48-52). The Examiner pointed out that Figs. 11-14 of Berg showing an inner layer (74) and an outer layer (18), while the circumference of the inner layer has a discontinuity and is non-overlapping (66) and the circumference of the outer layer is continuous. Applicant respectively disagrees

with the Examiner's assertion. Berg catheter shown in Figs 11-14, as cited by the Examiner, shows the longitudinal cross section the catheter with various shaped annular grooves (66) (Berg, Column 5, Lines 16-20, FIGs 11, 11A-11C). Such grooves (66) are formed by removing portions of outer layer (74) (Berg, Column 9, Lines 1-3, FIGs 11, 11A-11C). Fig 13 of Berg also shows that guide catheter further include filler material (18) located within grooves (66) (Berg, Column 10, Lines 16-18, FIG 13). Thus, circumferentially, depending on the location on the catheter, Berg catheter only shows one continuous layer formed either by the filler material (18) or by the outer layer (74). Hence, unlike Applicant's claimed invention, Berg guiding catheter does not include two largely overlapping layers – one circumferentially discontinuous inner layer and a circumferentially continuous outer coaxial layer.

Hence, Berg did not anticipate Applicant's claimed invention because it failed to teach each and every limitation of claims 1 and 26. Accordingly, Applicant respectfully requests that the Examiner re-consider and withdraw the rejection to claims 1 and 26.

Further, because claims 2-4 and 13-15 depend upon claim 1, incorporating all of the inventive aspects of the inventions in claim 1; and claims 27-31 depend upon claim 26, incorporating all of the inventive aspects of the inventions in claim 26; Applicant submits that these claims are patentable for at least the reasons that claim 1 and 26 are patentable. .

Claims 38, 45 and 50 of Applicant's invention are also independent and each recites, *inter alia*, that a conduit of a device having at least one layer with first and second types of sections varying in a circumferential direction, the circumferential direction lying in a plane perpendicular to a longitudinal direction of the conduit.

Applicant submits that Berg does not teach a device with at least one layer with first and second types of sections varying in a circumferential direction. As explained by Applicant above, that the Berg catheter shown in Figs 11-14, as cited by the Examiner, shows the longitudinal cross section the catheter with various shaped annular grooves (66) (Berg, Column 5, Lines 16-20, FIGs 11, 11A-11C). Fig 13 of Berg also shows that guide catheter further include filler material (18) located within the grooves (66) (Berg, Column 10, Lines 16-18, FIG 13). Thus, circumferentially, depending on the location on the catheter, Berg catheter only shows one continuous layer formed either by the filler material (18) or by the outer layer (74). Hence, unlike Applicant's claimed invention, Berg guiding catheter does not include at least one layer with first and second types of sections varying in a circumferential direction.

Hence, Berg did not anticipate Applicant's claimed invention because it failed to teach each and every limitation of claims 38, 45 and 50. Accordingly, Applicant respectfully requests that the Examiner re-consider and withdraw the rejection to claims 38, 45 and 50.

Further, because claims 46-49 depend upon claim 45, incorporating all of the inventive aspects of the inventions in claim 45; and claims 51 and 52 depend upon claim 50, incorporating all of the inventive aspects of the inventions in claim 50; Applicant submits that these claims are patentable for at least the reasons that claim 145 and 50 are patentable.

Accordingly, Applicant respectfully requests that the rejection of claims 1-4, 13-15, 26-31, 38, and 45-52 under 35 U.S.C. § 102(e) over Berg be reconsidered and withdrawn

Claim Rejections – 35 U.S.C. § 103(a)

The Examiner rejected claims 1-5, 16-18, 20, 21, 32-44, and 50-56 under 35 U.S.C. § 103(a) over U.S. Patent No. 5,318,588 to Horzewski in view of Berg *et al.* The detailed rejections are set forth in paragraph 4 of the Office action. Applicant respectfully traverses and submits that the above claims were not obvious over Horzewski in view of Berg. Without disclaiming any other inventive aspects of the claimed invention, Applicant submits that, first, Horzewski does not teach a device with an inner layer forms a discontinuity and is non-overlapping and also a portion of the outer layer extends between the discontinuities; second, Horzewski does not teach a device with at least one layer with first and second types of sections varying in a circumferential direction, and the elasticity of one of the sections is greater than the elasticity of another one of the sections; and lastly, Berg fails to remedy the deficiencies of Horzewski.

Among the rejected claims, claims 1 and 32 of Applicant's invention are independent claims and each recites, *inter alia*, that a conduit of a device having inner and outer coaxial layer bonded together such that the outer layer surrounds the inner layer, wherein the circumference of the inner layer is discontinuous so as to form a discontinuity and is non-overlapping, and the circumference of the outer layer is continuous, wherein a portion of the outer layer extends between the discontinuity.

Applicant submits that Horzewski does not teach a device with an inner layer forms a discontinuity and is non-overlapping or a portion of the outer layer extends between the discontinuities. Horzewski teaches radially expandable intravascular device with an outer

sheath and an inner portion, where the inner portion has a slit or folded configuration (Horzewski, Column 10, Lines 17-21). Unlike Applicant's claimed invention, and as the Examiner already has pointed out in the Office Action, that Horzewski does "not disclose a conduit having an inner layer forms a discontinuity and is non-overlapping and also a portion of the outer layer extends between the discontinuities."

Applicant further submits that Berg fails to remedy the deficiencies of Horzewski. As explained by Applicant above, circumferentially, depending on the location on the catheter, Berg catheter only shows one continuous layer formed either by the filler material (18) or by the outer layer (74). Thus, Berg device has no discontinuous and non-overlapping inner layer and no portions of the continuous outer layer extending between the discontinuity. Hence Berg can not be combined with Horzewski to cure the deficiency of Horzewski. Therefore, claims 1 and 32 are not obvious over Horzewski in view of Berg.

Claims 2-5 and 16-18 depend from claim 1, incorporating all of the inventive aspects of the inventions in claim 1, and claims 33-37 depend from claim 32, incorporating all of the inventive aspects of the inventions in claim 32. For the same reasons, Applicant submits that claims 2-5, 16-18, and 33-37 are also not obvious over Horzewski in view of Berg.

Claims 38 and 50 of Applicant's invention are also independent and each recites, *inter alia*, that a conduit of a device having at least one layer with first and second types of sections varying in a circumferential direction, and the elasticity of one of the sections is greater than the elasticity of another one of the sections.

Applicant submits that Horzewski does not teach a device with at least one layer with first and second types of sections varying in a circumferential direction, or the elasticity of one of the sections is greater than the elasticity of another one of the sections. As mentioned above, Horzewski teaches radially expandable intravascular device with an outer sheath and an inner portion, where the inner portion has a slit or folded configuration (Horzewski, Column 10, Lines 17-21). Thus, in a circumferential direction, Horzewski device has one continuous outer layer and an inner layer either in a continuous and folded configuration or discontinuous and overlapped configuration. Unlike Applicant's invention, Horzewski device does not have at least one layer with two types of sections varying in a circumferential direction, and furthermore, Horzewski device does not teach that the elasticity of one of the sections is greater than the elasticity of another one of the sections.

Applicant further submits that Berg fails to remedy the deficiencies of Horzewski. As explained by Applicant above, circumferentially, depending on the location on the catheter, Berg catheter only shows one continuous layer formed either by the filler material (18) or by the outer layer (74). Thus, Berg device does not include one layer with first and second types of sections varying in a circumferential direction, and the elasticity of one of the sections is greater than the elasticity of another one of the sections. Hence, combining Berg with Horzewski will not cure the deficiency of Horzewski. Therefore, claims 38 and 50 are not obvious over Horzewski in view of Berg.

Claims 20, 21, and 39-44 depend from claim 38, incorporating all of the inventive aspects of the inventions in claim 38; and claims 51-56 depend from claim 50, incorporating all of the inventive aspects of the inventions in claim 50. For the same reasons, Applicant submits that claims 20, 21, 39-44, and 51-56 are also not obvious over Horzewski in view of Berg.

Accordingly, Applicant respectfully requests that the rejection of claims 1-5, 16-18, 20, 21, 32-44, and 50-56 under 35 U.S.C. 103(a) over Horzewski in view of Berg be reconsidered and withdrawn.

CONCLUSION

Applicant submits that the claims are in condition for allowance. Accordingly, a favorable action is thereby respectfully requested. The Examiner is invited to telephone the undersigned to discuss any outstanding issues.

Respectfully submitted,

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